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ABSTRACT

The Nebraska State Department of Education sought to raise the level of management skills of educational administrators through the establishment of planning and evaluation capability among personnel. Training sessions in both planning and evaluation skills were held. This publication contains the materials used in the training sessions in evaluation skills. It includes a program schedule, objectives for the sessions, an outline of the materials, an annotated bibliography of materials used, and the sample information collection instruments (see TM 001 079, 080, 081). (Author/AG)

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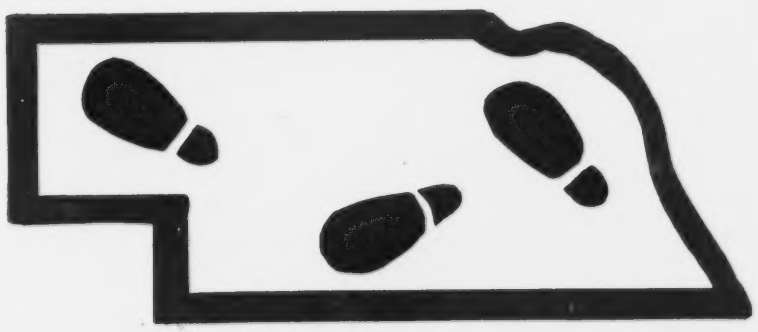
# EVALUATION



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# evaluation. . .

*ACCOUNTABILITY. . . II*

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## FOREWORD

This publication is the result of an effort by the Nebraska State Department of Education to raise the level of management skills of Department personnel. The State Education Agency designated a section for planning and evaluation within the Division of Instruction. Planning and evaluation functions were specifically requested of the section by both Federal and State education programs.

The Planning and Evaluation Proposal states the goal of this project as follows: "To prepare training materials and training opportunities for educational middle-management personnel in the process of evaluation."

Twelve hours were specifically provided and used for the training sessions in evaluation skills for program administrators of the Instructional Division. This publication includes the materials supplied to the participants in a notebook for the sessions. It also includes the instruments that were used to collect information from the participants. The process and evaluation of these training sessions appear in a companion piece to this publication.It is anticipated that divisions in other Departments of Education, as well as local education agencies, might be able to profit from the process and materials used in Nebraska for training middle-management personnel.

The establishment of evaluation skills as an operational function among program administrators in the Division has been a sincere effort to raise the level of accountability toward that which is required in the investment of Federal, State, and local dollars. We believe that these sessions have contributed to that effort.

**Cecil E. Stanley**
*Commissioner of Education*

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**Suggested Program Schedule for**
**Training Sessions in Evaluation Skills**

**Monday**

1:00 - 4:00 Using a Systematic Planning Model

**Tuesday**

9:00 - 9:30 Evaluation and Educational Decisions
9:30 - 11:00 Part I of the Assessment Planning Chart

Lunch

12:00 - 1:00 Rationale and Description of a Student Information System
1:00 - 2:00 Part II of the Assessment Planning Chart
2:00 - 2:15 Coffee Break
2:15 - 3:15 Discussion of the Assessment Planning Chart
3:15 - 4:00 Trait Validation Procedures

**Wednesday**

9:00 - 12:00 Indicators of Quality

# NOTEBOOK MATERIALS

OBJECTIVES:

1. The participants should be able to state the goals for education by which their work should be influenced.

2. They should be able to identify the functions they pursue which relate to those goals.

3. The participants should be able to describe the four types of decisions necessary to educational development, and the kinds of evaluation which each require.

4. They should be able to identify the kinds of decisions which are necessary for their functions.

5. They should be able to name the kinds of evidence which are needed to judge their success.

6. They should be able to relate the outcomes of their work to the goals for education which are influencing their work.

7. The participants should be able to demonstrate several uses of the Student Information System.

8. They should be able to apply the Systematic Planning Model to evaluation procedures.

9. They should be able to identify and interpret the four Indicators of Quality.

## PLANNING EDUCATIONAL EXPERIENCES THROUGH SYSTEMATIC PROCEDURES

Carl Spencer
*Consultant, Milford Service Unit*

A. Rationale

1. Professional education managers must be concerned with the ultimate purpose, effectiveness, and efficiency of the program.

2. Specific answers to the following questions are needed to provide an effective and efficient program:
   a. What is the program to produce or achieve?
   b. How do you know the objectives are of importance for the program?
   c. How will one know when the program has achieved its ultimate purpose or goal?
   d. How will one measure the effectiveness and efficiency of the program in reaching its goal?
   e. How will one know when to revise or change the program design and goals?

3. The professional educator's primary attention should be given to:
   a. The student/learner.
   b. His predictable learning success.
   c. His learning of skills, knowledges, and attitudes which are relevant to the role for which he is being prepared as a citizen, parent, producer, and consumer.

4. Requirements for designing and implementing instructional programs and coordinating methods for managing these programs:
   a. Start with the learner.
   b. Design programs for instruction and management measured in terms of student learning or success.
   c. Establish measures of accountability for teachers, administrators, managers and learners which must be expressed in terms of specific performance, thereby allowing an objective evaluation of performance efficiency for all concerned.
   d. Provide for plans of action which assure the continuous production or development of relevant learner behaviors (skills, knowledges, and attitudes) assuring later success for the learner.
   e. Provide plans of action which efficiently and effectively integrate all members of the instructional and management teams while providing the greatest societal benefits at the least cost.
   f. End with the learner as the educational referent for planning, designing, implementing, evaluating, and managing of instructional and management programs.

5. Educators must establish more systematic procedures in order to satisfy this criterion of accountability to both learners and society.
   a. Producing predictable learner achievement requires a more objective and controlled process for:
      (1) Defining relevant skills, knowledges, and attitudes to be produced.
      (2) Defining the "learnings" to be produced in measurable terms in order to assess learner achievement.
      (3) Specifying in advance the performance requirements representing the ultimate learner achievements to be measured on completion of instruction.
   b. Formal methods for planning, designing, implementing, evaluating and managing plans of action must be substituted for *informal* and less efficient methods.
   c. The formal method best suited to existing requirements in education and training is that of a system approach to educational problems.

B. The Systematic Planning Model *(James O'Hanlon and Carl Spencer)*

1. Any learning experience must be based on some *concern* felt by the learner.

2. Establishing specific *objectives*
   a. What will the learner be able to do to demonstrate that he has reached the goal?
   b. The objectives should be closely related to one of the learner outcomes, stated as an observable behavior, and measurable.

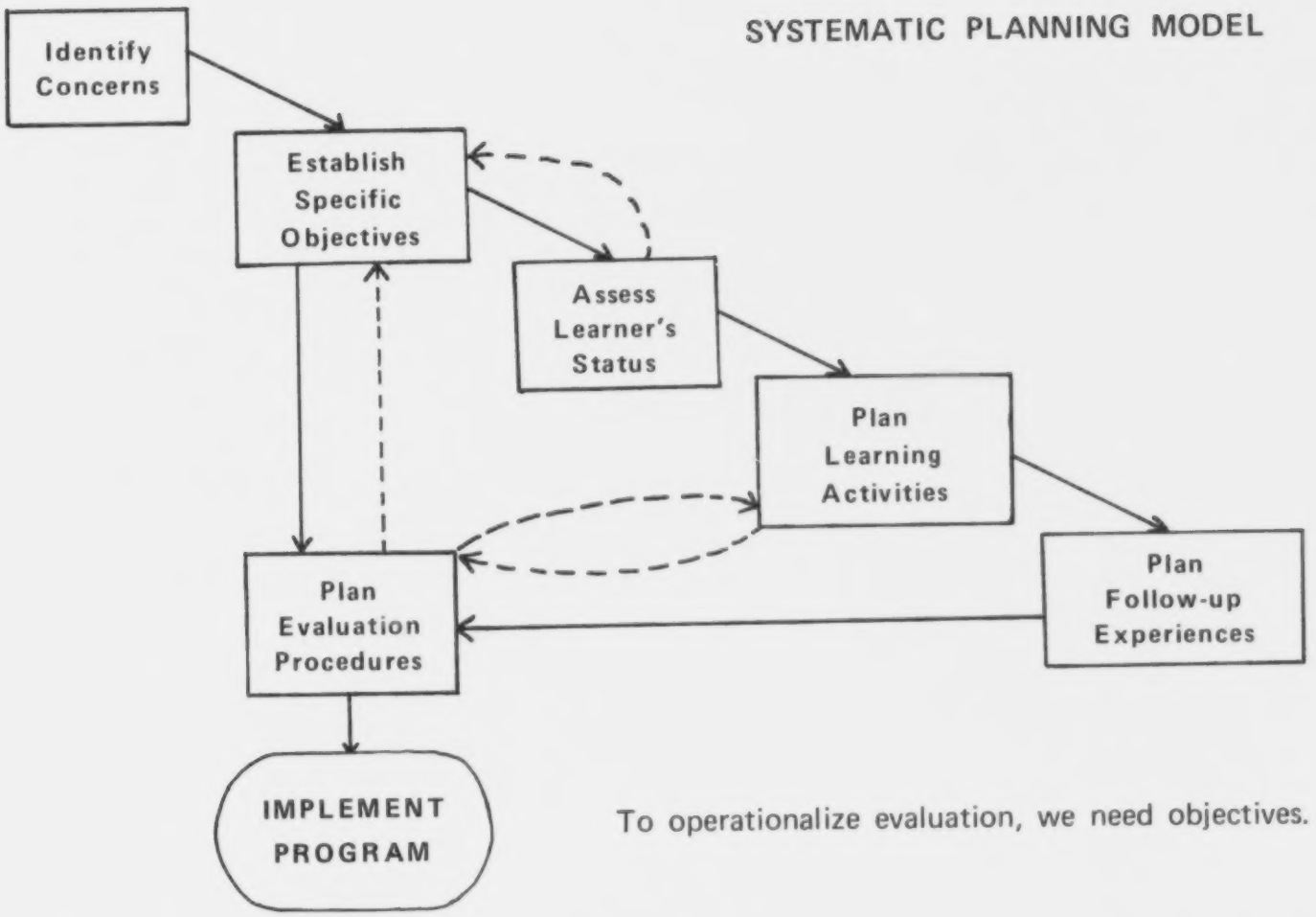
3. Assessing the *learner's status*

4. Planning learning *activities*
   a. Set
   b. Modeling
   c. Appropriate practice
   d. Reinforcement

5. Planning *follow-up* experiences
   a. Helping learners apply what they've learned.

6. Planning *evaluation* procedures
   a. Did the learning succeed in getting the learner to incorporate the objective behavior in his work?
   b. What parts of the learning experience were most helpful to the learner?

## SYSTEMATIC PLANNING MODEL




To operationalize evaluation, we need objectives.

## OUTLINE OF MATERIALS

**I. What is Evaluation?**

A. Evaluation is a process providing some basic elements to administrators:

1. An internal information system for better accomplishing the process of *adaption* in the course of change.

2. Feedback – information which is intended to effect control.

3. Information to decision-makers.

B. Educational Evaluation is the *process* of *obtaining* and *providing useful information* for making *educational decisions.*

1. Process – A specific, continuing activity which includes many methods and involves a number of steps or operations.

2. Obtaining – Making available through processes (collecting, organizing, analyzing and reporting) and formal means (statistics, measurement, and computer processing).

3. Providing – Fitting together into systems or subsystems that best serve the needs or purposes of evaluation.

4. Useful – Appropriate to predetermined criteria evolved through the interaction of the evaluator and the client.

5. Information – Descriptive or interpretive data about things that are real and their relationships.

6. Educational Decisions – Choosing among alternatives which affect education.

C. Evaluation is the process of providing and using information to make planning, structuring, implementing, and recycling decisions.

**II. Where Does Evaluation Fit in Educational Development?**

A. Evaluation may be one element *within* educational development.

1. Educational needs
   a. Of the society
   b. Of the individual

2. Specify the problem
   a. Problem 1 – need
   b. This is **not** a problem that exists as an obstacle.

3. Conceptualization of a strategy

4. Implementing various types of strategies

5. Developing an operational plan

6. Developing processes, procedures, and materials

7. Development of an evaluation design

8. Testing the treatment

9. Analysis, interpretation, and recommendation

B. Evaluation may be a part of all the elements of educational development.
   1. *Planning* decisions require *context* evaluation.
      a. These decisions specify changes needed in a program.
      b. This type of evaluation is aimed at continuous monitoring of the program to identify needs as they occur.
      c. The method of this evaluation is the definition and frequent measurement of variables which characterize the total program of interest.

   2. *Structuring* decisions require *input* evaluation.
      a. These decisions specify objectives; method, personnel, budget, schedule, organization, and content for use in effecting desired changes.
      b. Input evaluation is aimed at identifying and assessing relevant capabilities available to the program to define objectives, and to identify and assess alternative action plans for achieving the stated objectives.
      c. The method used in this evaluation is not specified. The prevalent practices, however, include panel deliberations, appeals to professional literature, and employment of consultants.

   3. *Implementing* decisions require *process* evaluation.
      a. These are the decisions used in carrying through the action plan.
      b. Process evaluation is aimed at detecting or predicting defects in the project operations and/or project design.
      c. The method used in this evaluation includes continuous identification and monitoring of the potential sources of failure in a project.

   4. *Recycling* decisions require *product* evaluation.
      a. These are the decisions used in determining the relation of outcomes to objectives and in determining whether to continue, terminate, evolve, or modify the activity.

b. Product evaluation is aimed at relating outcomes to objectives and to context, input, and process. It is aimed at the measurement and interpretation of outcomes.
c. There are three basic methods used in this type of evaluation:
   (1) defining and measuring criteria associated with the objectives of the activity.
   (2) comparing these measurements with predetermined absolute or relative standards.
   (3) making interpretations of the outcomes, using the recorded context, input, the process information.

5. Evaluation is a continuous process in this plan which may be initiated at the following times:
   a. prior to decision to write a proposal
   b. while writing a proposal
   c. during project implementation
   d. following or near the end of a complete cycle of the project

## III. Objectives of Evaluation

A. Providing data related to system operation for administrative direction and control of change.

B. Providing for the collection, organization and storage of data relative to programs and goals of the system.

C. Providing for the analysis and evaluative procedures and techniques for program implementation, operation and termination.

D. Providing a response capability for the facilitation of change and revision of programs and procedures.

E. Providing for an ongoing evaluation of the evaluation system.

F. Providing for the communication of information within and without the system.

## IV. Purposes of Statewide Evaluation

A. To provide basic information for helping the student assess his own progress through the educational systems of the state, so he can understand himself, his educational needs, and his future possibilities.

B. To provide the teachers and administrators in every school system with basic information for assessing the effectiveness of all principal phases of their

educational programs in sufficient detail to indicate specific steps to strengthen those programs.

C. To provide the state education authority with basic information needed for allocating state funds and professional services to equalize educational opportunities for all children in the state.

D. To provide local and state research agencies with data for generating and testing hypotheses concerning the improvement of all aspects of the educational process.

E. To provide every school system with strong incentives to experiment, under controlled conditions, with new and promising educational programs, materials, devices, and organizational arrangements.

F. To periodically provide the state legislature and the general public with readily interpretable information concerning the progress of the state system of education as a whole and of each local system.

## V. Criteria for Evaluating Proposed Project Evaluations

*(Note: The first four are general and common to any good evaluation information.)*

A. *Internal Validity* – information provided by the evaluation must show a reasonable correspondence to the phenomena which it purports to describe or interpret. It must have fidelity – be true.

B. *External Validity* – the information must be generally transferable to similar situations beyond the one in which it was collected.

C. *Reliability* – a repetition of the evaluation should produce essentially similar findings.

D. *Objectivity* – the data should be interpreted in much the same way by a number of people.

*Note: In addition to these first four, evaluative information requires:*

E. *Relevance* – the information must relate to the decisions to be made.

F. *Significance* – the information must be weighted for its meaning in relation to the decision. Not all relevant information carries the same weight.

G. *Scope* – the information must relate to *all* aspects involved in the decision.

H. *Credibility* – the evaluator who secures information must be trusted by the decision-maker and those he must serve.

I. *Timeliness* — the information must be prepared in time to be useful to the decision-maker.

J. *Pervasiveness* — the information must get to all who need it.

## "FROM EVALUATION THEORY INTO PRACTICE" (excerpt)

Howard O. Merriman
*Director of Evaluation and Research*
*Columbus, Ohio, City Schools*

The evaluator's role in context evaluation may be largely one of delineating the information needs of decision-makers, establishing the criteria by which exceptions to the acceptable level of performance or behavior can be identified, developing the mechanisms for collecting this information, and providing the information to the appropriate decision-makers, decision influencers and audiences in such a way that it can be understood and utilized. Much information is available within school districts which could be of high utility in making decisions. However, access to such information in a timely manner may be restricted through a lack of knowledge of its availability or applicability, lack of data-handling capability or capacity, or through a lack of established networks for information flow.

The evaluator works at two levels: (1) establishing a context evaluation information system and (2) facilitating the flow and use of such information. The former, establishing the system, is a means for the evaluator to employ the leverage principle, thereby multiplying his effectiveness and gaining efficiency. The evaluator's interest is in delineating information needs, and the establishing of a system to obtain and provide that information. He must utilize other roles in the organization to operate that system; for example, the teachers and counselors who administer tests which provide data on individual students and groups of students. The processing of test answer sheets by a data-processing unit is a part of obtaining information, just as the printouts of school summary data are a part of providing information. Neither of these operations needs to be maintained or operated by the evaluator. He is, however, interested in setting up the process or system whereby the data is obtained and provided. He will wish to test the information system for quality control, since the reliability, validity and precision of the information provided through that system are very important to him.

The evaluator, while facilitating the flow of useful information must, at the same time, avoid overburdening the decision-maker with more information than he can use. He may establish methods of exception reporting, for example, through which the decision-maker receives information only when previously established upper and/or lower limits have been exceeded.

Once such a context evaluation information system is established, a major role of the evaluator may be that of resetting criterion levels or establishing new criterion measures which will reflect new conditions of concern to the educational community.

In summary, an evaluation department which is to provide information for planning decisions must include a component which has as its mission the development of an information system by: delineating, with decision-makers, their information needs;

determining criteria and levels to be used in analyzing information acquired and establishing mechanisms to obtain this information; and building networks to insure the flow of such information to the appropriate decision-maker(s). Ideally, over the long run, once such a system is established, the evaluator may only have to exercise a quality control function.

## STUDENT INFORMATION SYSTEM

The gathering of student information, keeping it updated, and using it in a meaningful way to assist students in learning has challenged educators for many years. The Student Information System (SIS) is an effort to meet the challenge in the computer age. In the past we have been forced to look only at those learning objectives for which we had measures – IQ and achievement tests. But now we are starting to realize, in fact being forced to realize, that we have a number of objectives, not just scores on tests. In behavioral research, learner differences must be identified, as well as attitude highs, IQ levels, and all the *other* aspects of the student. The objectives that are used, must all be identified, and program ties used to attain those objectives must be determined. Then it's not a matter of one school against another, or one program against another program, but rather which kind of things work for which students and under which conditions. Then it's not a matter of whether a teacher is "good" or "bad," but rather, what specific skills he has that are effective and for which kinds of students.

The first step was to search the research literature and select the variables and information readily available in the schools which correlate in any way with learner and program objectives at various levels. Personnel with skills in system analysis, data processing, school administration, teaching, learning theory, psychology, social work, occupational guidance, personality theory, educational measurement, curriculum, and so on, all participated in the development of SIS. The second step was to determine the best sources of the needed information. They are the teacher, parents, students, the various specialists, and current school records. After the content was outlined and the sources described, instruments (check lists, questionnaires, etc.) were developed for field trials for gathering and analyzing data.

The final step was to determine the best ways to analyze the data so that it would be meaningful and useful, and to organize distribution techniques to teachers, administrators, etc. A method was devised whereby the instruments can be scored either by hand or with an electronic optical scanner for computer analysis. The computer output of SIS includes administrative reports as well as records, evaluations, and diagnostics of individual students or any particular group of students.

The primary purpose of SIS is to provide schools with the necessary materials and step-by-step procedures that will:

1. Help determine each student's individual learning and program needs.

2. Provide teachers, administrators, parents, and students with descriptions of these needs.

3. Provide reports which aid in specifying program planning to meet student needs.

4. Provide baseline information to evaluate attainment of learning and program objectives.

5. Provide evaluation data on the effects of any project or program on different kinds of student performances for any student group.

6. Provide necessary data for administrative reports and for program planning.

7. Provide easily accessible and easily interpretable, permanent records for specific target groups of students, comparison of test scores, expected percentages of students needing special education, demographic analysis, etc., for long-range planning.

8. Identify incipient learning problems and developmental difficulties at preschool and kindergarten levels.

9. Provide the basis for an analysis of agreement/disagreement between parent/school/student expectations of the educational system (a major administrative problem in many districts.)

Information for SIS is provided by a set of data forms which gather information from students, parents, teachers, and specialists. These instruments contain information similar to the current Cumulative Record, and therefore, could eventually replace it. The basic forms are:

1. ***Parent Questionnaire*** – The parent describes the environment, interests, abilities, and characteristics of his child.

2. ***Student Check Lists*** – There are three check lists through which the teacher describes the achievement, problems, and behavioral characteristics of the student.

3. ***Student Questionnaire*** – The student describes his interests, attitudes, plans, and so on. Three levels are available – elementary, secondary, and post-high school.

4. ***Special Forms*** – For gathering test scores, administrative information, specialists' report, and the like.

5. ***Other Forms*** – May be developed for individual district requirements and added to the system to meet specific district needs.

## REPRESENTATIVE LEARNING OUTCOMES AND POSSIBLE METHODS OF EVALUATION

| *LEARNING OUTCOMES* | *METHODS OF EVALUATION* |
|---|---|
| A. Application<br>Concept Acquisition<br>Memorization of Facts<br>Problem Solving<br>Reading Comprehension<br>Skills (number, etc.) | A. Objective Test<br>Product Evaluation<br>Rating Scale<br>Checklist |
| B. Performance | B. Rating Scale<br>Checklist<br>Product Evaluation |
| C. Classroom Behavior | C. Rating Scale<br>Checklist<br>Attendance Record, etc. |
| D. Interest | D. Questionnaire<br>Checklist<br>Interest Inventory<br>Factual Vocabulary Test |
| E. Attitude | E. Rating Scale<br>Questionnaire<br>Checklist<br>Objective Test |
| F. Aspiration Level | F. Rating Scale<br>Interview<br>Simple Objective Test<br>Word Association Test<br>Open Ended Sentences |
| G. Adjustment | G. Rating Scale<br>Anecdotal Report<br>Interview, Sociogram |

The methods of evaluation would be simplified and the process facilitated if one instrument were designed to coordinate all the above methods.

## Instructions for Assessment Planning Chart

Given the general concerns in education that the people of Nebraska seek for their children, department members will decide which goals are appropriate to their positions.

Working in groups related by common concerns, participants will write functions of their work that relate to that goal. The functions will be placed under the kind of decision (planning, structuring, implementing, or recycling) which the function exhibits. Participants will then be asked to write down what kind of evidence is needed to show if they have been successful in that function. For each function, which involves changes in pupil behaviors, participants should list the desired behavior change. Each behavior should be listed separately and should describe specifically what the pupil should do at the conclusion of the project.

Traditionally, one or more of the methods or instruments of evaluation listed on the previous page could be chosen to evaluate the presence of the desired behavior change. But assuming that we have one instrument which could be used to evaluate such changes (the Student Information System), then participants will be asked to choose items on the Confidential Student Questionnaire (Level II) Part II which they feel would measure this behavior change. The numbers of the chosen items should be recorded under the final column in the square joined to the behavior which it tends to measure, along with the numbers of items from the Student Behavior Check List which participants feel also measure that trait.

## ASSESSMENT PLANNING CHART (Part I)

| GOAL | DECISIONS | FUNCTIONS | EVIDENCE OF SUCCESS |
|---|---|---|---|
| | PLANNING | | |
| | | | |
| | | | |
| | STRUCTURING | | |
| | | | |
| | | | |
| | IMPLEMENTING | | |
| | | | |
| | | | |
| | RECYCLING | | |
| | | | |
| | | | |

The evidence of success for some functions will probably be exhibited in pupil changes. In the first column, list desired behavior changes of pupils as a result of one of your functions.

Then choose items on the Confidential Student Questionnaire (Level II) Part II which you feel would measure this behavior change. Then record the numbers of the chosen items in the next column in the square joined to the behavior which it tends to measure.

Finally, choose items on the Student Behavior Check List which you feel would also measure this change. Record these numbers in the final column.

| (Part II) | ITEMS OF EVALUATION | |
|---|---|---|
| *BEHAVIOR CHANGES* | *SQ II* | *SBCL* |
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## TRAIT VALIDATION PROCEDURES

Before any scale which attempts to identify creative students can be developed, the goals and objectives of the programs developed for such students must be determined. These goals and objectives must be continually referred to in the consideration of both students and scale items. It is also important that people involved in the selection of scale items understand the significance of each item. It is difficult to indicate that most items relate to a specific attitude or behavior. Rather, many items are included because different groups of students respond to them with different kinds of answers. If one item reads "I hate dogs," the important consideration is not whether an individual likes or dislikes dogs. Rather, the usefulness of the item lies in the tendency of certain types of students to give either a "high" or "low" response to it. This is known as the "discriminating power" of the item.

There are two basic steps in developing a scale for the identification of those students who might benefit from a program designed to help develop creative potential. In the first step, half of those people who are responsible for identifying such students actually fill out the Student Questionnaire Level II (SQ II) themselves. They respond to each item as they feel a student who possesses creative potential would. The items which are commonly responded to as "high" or "low" by this group, then become those items which a creativity scale might contain.

The other half of this group should respond to each item on the SQ II as they feel a student of very limited creative potential would. The items which they agree such a student would make a "high" or "low" response on may also become components of a creativity scale. Both halves of the group should then review each item on the SQ II to determine the degree to which it might relate to the goals and objectives of the program for which potential students are being selected.

In the second step, teachers or other individuals in a position to make student evaluations identify a group of students who most nearly exhibit the behaviors associated with mastery of the objectives of a creativity program. They are also asked to identify a group of students who seem to have very little creative potential. The answers these two groups of students made on the SQ II are then analyzed to find on which items their responses were consistently different. Each item on which these groups consistently differed in their responses is a potential part of the creativity scale. In this process it is very important that those people who identify individual students limit their consideration to indicators of creative potential alone. Other factors of the student's personality or background (personal habits, appearance, etc.) must be given absolutely no weight.

## ANNOTATED BIBLIOGRAPHY

Beatty, Walcott H., Chairman and editor, Association for Supervision and Curriculum Development, NEA, *Improving Educational Assessment and an Inventory of Measures of Affective Behavior*, ASCD, 1969.

The first part of this book is a collection of four papers which analyze the system we have for collecting and using data and which propose extensions of the system to catch new purposes and new dimensions. An important chapter by Daniel L. Stufflebeam discusses evaluation's role in decision making. The last part is an annotated resource list to enable us to measure affective behavior.

Bush, Donald O., and Willard G. Jones, "Educational Development – from research to practice. . .," Rocky Mountain Educational Laboratory, Inc., Greeley, Colorado, April, 1969.

This document discusses the nature and process of educational development. One of the most beneficial aspects of the booklet is a presentation portraying a model for this development with very precise definitions. It locates evaluation as a necessary element of the process being both dependent on previous elements and depended upon.

Davis, Joseph L., and Martin W. Essex, *Educational Evaluation*, Columbus, Ohio, 1969.

This book is a collection of speeches given at a conference sponsored by the Ohio Department of Education. They deal with the need and importance of accurate measuring, appraising and assessing instruments, as well as evaluation designs and models and the use of evaluation evidence.

Dyer, Henry S., "Statewide Evaluation – What Are the Priorities," *Phi Delta Kappan*, June, 1970.

This article does an excellent job of stating the purposes of statewide evaluation. These purposes are then ranked by the author in order as he sees their importance with individual justification of those ratings.

Foley, Walter J., "The Future of Administration and Educational Evaluation," *Educational Technology*, July, 1970.

This article discusses the change concept of educational systems. It differentiates between the administrative function (managing change) and the role of evaluation (providing information). With this difference in mind he states the objectives of evaluation and designs a model evaluation system.

Hemphill, John K., "Educational Development," draft, February, 1969.

This article distinguishes between two types of educational development: the product development approach and the change support approach. The emphasis of change support approach is on the continuation of educational development as a process. It is never to be completed since it can never be said to reach a point where further improvement is not possible. Objectives then become temporary states and evaluation becomes feedback.

Merriman, Howard O., "From Evaluation Theory Into Practice," *Journal of Research and Development in Education*, Vol. 3, No. 4, Athens, Georgia, Summer, 1970.

This article emphasizes the four kinds of decisions made in educational development and the kinds of evaluation they require. Each type of evaluation is then described in relationship to the information it will produce in order to arrive at one of the four kinds of decisions.

Olson, Thomas A., and Lelia Marvin, "Evaluation: One State's Approach," *American Education*, Vol. 6, No. 4, May, 1970.

This article describes the process used by the Department of Education in Illinois to evaluate their 55 Title III projects. Their major attempt was described as "humanizing evaluation through consultants." Contrary to most evaluation techniques, they were encouraged to make value judgments and offer personal opinions.

Provus, Malcolm, "Toward a State System of Evaluation," *Journal of Research and Development in Education*, Vol. 3, No. 4, Athens, Georgia, Summer, 1970.

This article discusses the cycle of an evaluation system and the areas deserving special emphasis. The whole system is based on the idea that one *plans* on the basis of knowledge derived from evaluating one's successes and failures. The author also gives a list of questions which must be answered to make the system work.

Spencer, Carl R., *Planning Workshops Through Systematic Procedures*, pamphlet, ASCD 25th Annual Conference, March 16, 1970.

This article provides a rationale for using systematic procedures in planning educational experiences. The pamphlet then follows up the rationale with the actual model for systematic planning. This model provides for evaluation procedures when it establishes objectives.

Stufflebeam, Daniel, Robert Hammond, and Egon G. Guba, "Planning and Implementing Title III Evaluations," United States Office of Education, April, 1968.

This statement begins with a discussion of the variables of the three dimensions of evaluation—instruction, institution, and behavior. They define evaluation in terms of

providing information for four types of educational decisions. They describe the kinds of evaluation necessary for each of these decisions in terms of objectives and methods.

Wainwright, Bruce, *Manual of Student Information System*, Lincoln, Nebraska, April, 1970.

This manual explains the Student Information System (SIS), its purpose, how it was developed, its structure and content, and all possible uses. It includes information on administering the questionnaires, as well as scoring methods and interpretation.

New England Educational Assessment Project, *A Guide to Assessment and Evaluation Procedures*, Providence, Rhode Island, February, 1967.

This guide is aimed at aiding local school systems in the complex work of evaluation of Title I and other special education projects. It provides the general design of an evaluation program and strongly suggests that the instruments used for measurement are pertinent to the project activity and to the pupils involved.

Office of the Utah State Board of Education, *Handbook of Student Information System*, Salt Lake City, Utah, February, 1970.

This handbook accompanies the SIS manual and permits a person without special training to utilize SIS data in a variety of ways. Also included in this manual are several examples of research designs which are appropriate for both individual and group application of SIS derived data.

United States Office of Health, Education, and Welfare, *Preparing Evaluation Reports – A Guide for Authors*, United States Government, Printing Office, Washington, 1970.

This guide is to aid evaluators in preparing reports through decisions of what to include and how to report it. It follows a very logically developed pattern consisting of the context of the program, the program itself, evidences of changes, and recommendations.


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# APPENDIX

## INDICATORS OF QUALITY

adapted from a brochure printed by

*The Institute of Administrative Research*
*Teachers College – Columbia University*

The Indicators of Quality is a new instrument for measuring school quality by observing the behavior that goes on in the classroom. It is based on characteristics of school behavior which are thought to be basic to quality. Four basic ones have been identified: individualization, interpersonal regard, creativity, and group activity. These were determined by educational experts who were asked to decide upon what bases they would judge school quality. They may be observed in the teaching-learning procedure.

Certain key concepts were found to define the content of the four criteria. They are:

*Individualization*

1. Knowledge of pupils
2. Physical facilities
3. Different tasks
4. Participation
5. Communication
6. Modification of questioning
7. Complementary teacher-pupil roles
8. Time for growth
9. Individual evaluation

*Interpersonal Regard*

10. Demeanor
11. Patience
12. Pupil involvement
13. Physical movement
14. Respect
15. Error behavior
16. Pupil problems
17. Atmosphere of agreement
18. Teacher-pupil identification
19. Evaluation as encouragement

*Creativity*

20. Time for thinking
21. Abundance of materials
22. Skills for thinking
23. Testing ideas
24. Unusual ideas
25. Question and answer technique

26. Self-initiated activity
27. Opportunity for speculation
28. Evaluation as motivation

*Group Activity*

29. Physical arrangement
30. Teacher purpose
31. Decision-making
32. Intercommunication
33. Conflict resolution
34. Cooperation
35. Role distribution
36. Group goals
37. Group personality
38. Consensus
39. Group evaluation
40. Teacher's group role

The instrument includes 51 items based on these 40 key concepts. Some of the concepts relate exclusively to teacher behavior, or pupil behavior; others may be discerned both in what teachers do and what pupils do.

With a criterion of quality exhibited in this instrument, objective scores obtained can be statistically related to other measures that result from administrative policy: level of financing, teachers' salaries, teacher characteristics, staff deployment and class size, community conditions, pupil background characteristics, pupil achievement, state legal regulations and a host of other factors that, in one way or another, are presumed to influence the quality of education. A study of these factors should indicate what changes could be made in the way our education is supported and managed.

# INFORMATION COLLECTION INSTRUMENTS

Name _____

In anticipation of the training sessions in evaluation (November 23, from 1:00-4:00, November 24, from 9:00-4:00, and November 25, from 9:00-12:00) we are asking you to complete this questionnaire. You will again be grouped on the basis of your choices. Please return this sheet to Vickey Radcliffe, 411 Building, South 13th Street, Lincoln.

Below is a list of educational concerns of the people of Nebraska, which might be considered as goal statements. Using a scale from 1-7, put a check in the box below the number which indicates how concerned your work should be with what the statement suggests. A check under #1 would mean that you are directly concerned with the statement, while a check under #7 would show no concern at all.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|
| | | | | | | |

1. To aid in the development of materials and programs which will help students prepare themselves for problems they might face in our contemporary society (Ex. drugs, sex education, decision making).

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|
| | | | | | | |

2. To initiate surveys to determine the number and description of physically or mentally handicapped persons in Nebraska, so that program development and resource allocation can be adjusted to their needs.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|
| | | | | | | |

3. To aid local schools in developing programs to help each student select and prepare himself for the world of work.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|
| | | | | | | |

4. To help schools identify their students as individuals, so that guidance, academic, and vocational programs are more relevant to their needs.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|
| | | | | | | |

5. To undertake studies to determine what "teaching competency" consists of and develop a system by which teachers, students and administrators can cooperate in the measuring of "teacher competency".

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|
| | | | | | | |

6. Survey leisure activities available in Nebraska and develop suggested physical education programs which would prepare students for those activities.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|
| | | | | | | |

7. To examine planning services that the State Department of Education makes available to those people who are considering reorganization of their districts.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|
| | | | | | | |

8. To help schools provide programs and services that will strengthen their local communities economically and socially.

TM 001 029

Name _____

## FINAL EVALUATION OF TRAINING SESSIONS IN EVALUATION SKILLS

**Part I:**

1. Put a (+) in front of the topic which you believe will be most useful to you in your work.
2. Put a (0) in front of the topic which you believe will be least useful in your work.
3. Put a (✓) in front of the topic which you feel needed more or better coverage.
4. Put a (X) in front of the topic which you feel needed less coverage.

_____ Using a Systematic Planning Model
_____ Evaluation and Educational Decisions
_____ Information Systems and Evaluation
_____ Indicators of Quality

1. Put a (+) in front of the methods which you feel were most effectively used.
2. Put a (✓) in front of the methods which were adequate.
3. Put a (0) in front of the methods which were least effectively used.

_____ Media
_____ Notebooks
_____ Group discussions
_____ Department speakers
_____ Outside speakers

**Part II:**

1. What problems do you anticipate in using what you have learned?

2. What contribution were you able to make in these sessions?

3. What was personally most meaningful to you about these sessions? Why?

4. If anything happened which aroused strong feelings in you (pleasant or unpleasant), briefly describe it.

TM 001 080

Name _____

## QUESTIONNAIRE FOR EVALUATION SKILLS

**Part I:**

In the blanks preceding each statement of function, code the kind of decision and evaluation which that function exhibits in educational development.

| Decisions | | Evaluation | |
|---|---|---|---|
| Code | | Code | |
| A. | Planning | 1. | Product |
| B. | Structuring | 2. | Process |
| C. | Implementing | 3. | Input |
| D. | Recycling | 4. | Context |

| Decisions | Evaluation | Functions |
|---|---|---|
| _____ | _____ | Seeking information from parents, students, visitors and teachers about the impact of a Title III project and comparing their responses with the project's objectives. |
| _____ | _____ | Seeking information from patrons and educators about the problems in education which they believe face the people of Nebraska. |
| _____ | _____ | Monitoring the reading progress of students involved in a project where the main objective is to improve their reading level by 2 grades. |
| _____ | _____ | Comparing the proportion of students retained in school between the 11th and 12th grades before and after the employment of a guidance counselor. |
| _____ | _____ | Having a representative group study literature on differentiated staffing, poll community attitude towards it, compare facilities available with those necessary to initiate it, and survey staff attitudes and availability. |
| _____ | _____ | Identifying the factors behind student unrest. |
| _____ | _____ | Measuring the learning gain from a television series. |
| _____ | _____ | Conducting a site visit to an ESEA Title III project. |
| _____ | _____ | Prior to initiating a humanities course, surveying available literature and materials, studying and setting course objectives by the English Department and deciding on interested, capable teachers for conducting the class. |
| _____ | _____ | Interviewing parents of children involved in classes for the handicapped to get their opinions about program success. |

T1 001 081

**Part II:**

Below is a list of situations in a classroom. Identify the concept which the content suggests. Put the abbreviation of one of the four Indicators of Quality in front of each situation:

I = Individualization
IR = Interpersonal Regard
C = Creativity
GA = Group Activity

_____ 1. Pupils have the stimulation of materials and other resources in great richness and variety.

_____ 2. Pupils are cooperating in putting on a play.

_____ 3. Pupils are seated in a circle.

_____ 4. A pupil giving a lengthy, detailed answer is listened to and accepted by the class and teacher.

_____ 5. Pupils are given time to choose books to read, while the teacher helps individual students pick books they are interested in and capable of reading.

**Part III:**

Put a T in front of the statements you believe to be true and an F in front of those which you believe are false. Use the back to explain any answers to statements which you feel are not clearly stated.

_____ 1. To operationalize evaluation, we need objectives.

_____ 2. There is little need to make provisions for evaluation procedures when planning learning activities.

_____ 3. Some kind of evaluation is needed prior to the decision to write a proposal.

_____ 4. An evaluation department which is to provide information for planning decisions must include a component which has as its mission the development of an information system.

_____ 5. The Indicators of Quality can be effectively used to evaluate the performance of teachers.